

Pt. 63, Subpt. UUU, Table 2

40 CFR Ch. I (7–1–12 Edition)

| For each new or existing catalytic cracking unit . . . | You shall meet the following emission limits for each catalyst regenerator vent . . . |
|--|---|
| 4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102. | Nickel (Ni) emissions must not exceed 13,000 milligrams per hour (mg/hr) (0.029 lb/hr). |
| 5. Option 4: Ni Lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102. | Ni emissions must not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. |

[67 FR 17773, Apr. 11, 2002, as amended at 70 FR 6942, Feb. 9, 2005]

TABLE 2 TO SUBPART UUU OF PART 63—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

As stated in §63.1564(a)(2), you shall meet each operating limit in the following table that applies to you.

| For each new or existing catalytic cracking unit . . . | For this type of continuous monitoring system . . . | For this type of control device . . . | You shall meet this operating limit . . . |
|---|---|---|---|
| 1. Subject to the NSPS for PM in 40 CFR 60.102. | Continuous opacity monitoring system. | Not applicable | Not applicable. |
| 2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR 60.102. | Continuous opacity monitoring system. | Not applicable | Not applicable. |
| 3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102. | a. Continuous opacity monitoring system. | Electrostatic precipitator | Maintain the hourly average opacity of emissions from your catalyst regenerator vent no higher than the site-specific opacity limit established during the performance test. |
| | b. Continuous parameter monitoring systems. | Electrostatic precipitator | Maintain the daily average gas flow rate no higher than the limit established in the performance test; and maintain the daily average voltage and secondary current (or total power input) above the limit established in the performance test. |
| | c. Continuous parameter monitoring systems. | Wet scrubber | Maintain the daily average pressure drop above the limit established in the performance test (not applicable to a wet scrubber of the non-venturi jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established in the performance test. |
| 4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102. | a. Continuous opacity monitoring system. | Electrostatic precipitator | Maintain the daily average Ni operating value no higher than the limit established during the performance test. |
| | b. Continuous parameter monitoring systems. | i. Electrostatic precipitator | Maintain the daily average gas flow rate no higher than the limit established during the performance test; maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; and maintain the daily average voltage and secondary current (or total power input) above the established during the performance test. |

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| For each new or existing catalytic cracking unit . . . | For this type of continuous monitoring system . . . | For this type of control device . . . | You shall meet this operating limit . . . |
|--|--|---------------------------------------|--|
| 5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102. | a. Continuous opacity monitoring system b. Continuous parameter monitoring systems. | ii. Wet scrubber | Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established during the performance test. |
| | | Electrostatic precipitator | Maintain the daily average Ni operating value no higher than the Ni operating limit established during the performance test. |
| | | i. Electrostatic precipitator | Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; and maintain the daily average voltage and secondary current for total power input) above the limit established during the performance test. |
| | | ii. Wet scrubber | Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established during the performance test. |

[67 FR 17773, Apr. 11, 2002, as amended at 70 FR 6942, Feb. 9, 2005]

TABLE 3 TO SUBPART UUU OF PART 63—CONTINUOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

As stated in §63.1564(b)(1), you shall meet each requirement in the following table that applies to you.

| For each new or existing catalytic cracking unit . . . | If your catalytic cracking unit is . . . | And you use this type of control device for your vent . . . | You shall install, operate, and maintain a . . . |
|---|--|--|--|
| 1. Subject to the NSPS for PM in 40 CFR 60.102. | Any size | Electrostatic precipitator or wet scrubber or no control device. | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. |
| 2. Option 1: NSPS limits not subject to the NSPS for PM in 40 CFR 60.102. | Any size | Electrostatic precipitator or wet scrubber or no control device. | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. |